

The Challenge Behind the Facade: Substance Abuse and Comorbidities

Berna Diclenur ULUĞ

Department of Psychiatry, Hacettepe University, Faculty of Medicine, Ankara, Turkey

"I do not know how I should describe..."

is the first sentence in the biographical notes a mother has written to describe her child who has reached the age to attend university.

The story begins with the prenatal stress of severe infection during pregnancy, difficulties of diagnosis, radiological investigations, and treatment with different antibiotics. The newborn is difficult to feed and to be made to sleep, with a tendency to cry persistently, although the newborn is also a cheerful, pretty, and lovable child. School phobia surfacing at childhood with signs of anxiety, such as severe abdominal ache, is subsequently followed by an eating disorder, irritability at early pubescence, problematic relationships with friends, and substance abuse. This child always finds it easier to attend to more than one issue at the same time, having a difficulty in sustaining concentration in one area; however, it is successful in most of the enjoyable preoccupations. The difficulties escalate after leaving home to study in a university owing to alcohol dependency, violent mood swings, failure in self-management, and demonstration of behavioral and social problems. Academically, the progress is not good, despite success in some of the subjects such that a good term may be followed by a completely unsuccessful one. There are symptoms of unrestrainable activity during the spring terms resembling a manic or mixed episode with increased alcohol use, which at times results in severe intoxication crises. This crises suggest the presence of "paradoxical disinhibition" triggered by alcohol or other sedative agents in attention deficit hyperactive disorder. In the patient with stress sensitivity since childhood and low-stress management ability, additional traumatic experiences because of disinhibition and problems of daily survival create an encapsulating bell jar of "no way out" type; in this vicious circle the patient cannot resist the need for the anxiolytic effects of alcohol.

These individuals, who were found to be difficult to "describe," understand, and manage by their parents, are also not "recognized" by our diagnostic guidelines. In our systems of categorical approach, they cannot be included into any one diagnostic class to arrive at a description. We can assume the symptoms to result from comorbidities. Diagnosis and treatment processes are most difficult for the psychiatrists in dealing with young adults with more than one disorder complicated with the diverse difficulties experienced in daily living. Given the high increase in cases of substance abuse disorder in our country during the recent years, substance dependency inevitably complicates the clinical picture. Multiple problems emerge one after another following the patient's presentation with "the façade" or "admission complaint" of substance abuse disorder. Professionals working in the field of substance abuse disorders always regard them as "comorbidity" rather than only as an occasional condition. Results of epidemiological studies on substance abuse disorder also indicate a very high prevalence of psychiatric comorbidities (1).

Diagnostic Issues

Among adolescents and young adults, alcohol and substance abuse disorders are frequently seen to be accompanied by bipolar, attention deficit hyperactivity, anxiety, conduct, and eating disorders. We can arrive at four to five diagnoses in some of the patients we follow up. In a vast majority of these diagnoses, the symptoms and difficulties start during early childhood, even infancy, thereby showing a definite developmental quality. In the histories of these patients, we have found traces of traumatic life experiences; this is associated with a lowered anxiety threshold and increased stress sensitivity, which has been present since childhood. The different explanations for the comorbidity of these complaints bear great importance not only for the ascertainment of treatment procedures but also for the ascertainment of preventive measures. The disorders concerned are those that start at childhood or adolescence and have a very low incidence of seeking treatment and effective treatment, although it is believed that significant clinical changes would have been achieved through early diagnosis and the prevention of one disorder accompanied with another.

Dimensional Approach and Externalizing Trait

It is recommended that in the case of comorbidity, alternative approaches should be employed in lieu of several classical diagnostic systems. Instead of separate diagnoses, new concepts to evaluate multiple disorders within a single and unique scope are being pursued;



the concept of "externalizing disorders" being one of these (2). While searching for symptom dimensions determining the covariance of the disorders frequently observed together, genetic research has indicated the presence of a latent but highly penetrative and familially transmitted externalizing trait. This trait reflects the existence of a biological vulnerability, whereas the behavioral disinhibition causes the development of one or more disorders involving the externalizing spectrum in an individual. In other words, the apparent disorders reflect the different facets of a single pathology. Externalizing trait is regarded as the mechanism that ties together the underlying anxiety or developmental distress with behavioral symptoms such as conduct, attention, inhibition, and self-management disorders. Neurobehavioral parameters related to the externalizing trait are the current subjects of research. These parameters are assessed by neuropsychological and brain function measurements and are associated with the dimension of externalizing; these neuropsychological and brain function measurements are expected to explain the neurobehavioral parameters

Severe Mood Dysregulation

Another recommendation in the framework of dimensional approach is the concept of "severe mood dysregulation" (3) that have taken its place as "Disruptive Mood Dysregulation Disorder" in the Depressive Disorders division of the DSM-5. This diagnosis is expected to prevent the unnecessarily high over diagnoses of bipolar disorder in children and adolescents that appear to have increased by approximately 40fold between 1995 and 2005 (4). However, in view of the frequent observation of comorbidities in the young, it has been stated in DSM-5 that this diagnosis can be made together with the diagnoses of major depression, attention deficit hyperactivity disorder, conduct disorder, and substance abuse disorder. Thus, the same old story repeats! The formulation of an all-inclusive "umbrella" diagnosis for the abovementioned additive disorders with overlapping symptoms does not seem to be soon.

In cases of affective disorders with rapid mood swings, the concept of bipolar spectrum disorders has also been put forward as an inclusive diagnostic choice (5), which expands particularly with regard to the clinical variants of the bipolar II disorder. Clinicians and researchers specializing in the subject emphasize the importance of the underlying temperaments as the dispositional dimension and argue that it will be adequate to explain the complicated clinical scenario by cyclothymic and hyperthymic temperaments superimposed by major depression episodes, anxiety-sensitive conditions, dysregulated impulse control and attention, and alcohol and substance abuse and/or bulimic episodes. It is asserted that these patients are quite often misdiagnosed as borderline personality disorder, resulting in errors of treatment and management. Observation of high prevalence of childhood attention deficit and hyperactive disorder among adults diagnosed with severe borderline personality disorder (6) supports the view that developmental cognitive or behavioral deficits at the outset are the determinants of the the Axis 2 disorder in adulthood. Research has also indicated that deficits in executive functioning and response control as well as in anxious-impulsive personality traits constitute endophenotypes for drug dependence (7).

Neurobiological Explanations

Through research on the mechanisms that link anxiety, depression, and substance abuse, interesting relationships have been recognized between the brain stress systems, such as the hypothalamo-pituitary axis, and the experience of stressful events. The coeffectiveness of neurobiological and psychosocial factors has been observed as is the case usually. 214 In a 5-year follow-up study of depressed and non-depressed adolescents

(8), the high cortisol levels at the start have been found to increase the risk of developing substance abuse disorder; this risk was even higher in the young individuals exposed to stressful events during the follow-up period. If the observed high cortisol levels at the outset were linked to the stressful living conditions or anxious-depressive states in earlier life, it is seen that the young individual is caught in an unbreakable spiral between stress and disease development. The relationship between depression and substance abuse disorder has been confirmed in this prospective follow-up study.

Therapeutic Approaches

Although research on diagnosis and etiopathogenesis are progressing, the steps expected in therapeutic approaches are slow even though they are being undertaken. Drug addiction is a brain disease, given the complications and the density of the neurobiological processes involved. An understanding of the developmental factors is absolutely necessary to reach the root cause for the dependency and the related comorbidities (9). The relationship, from the very start, between this complicated process and stress, dysregulation of emotion and behavior, and attention and impulse control disorders have to be understood; the treatment approach has to exclude the concepts of offense, shame, and punishment. On the contrary, treatment has to be focused on therapeutic alliance and awareness (10), which will definitely contribute to the success of the therapy. The "common" facets of these compounded syndromes in comorbidity cases exceed their differences when evaluated with respect to physical and psychological predispositions, the contributing cognitive and behavioral factors, and the course and outcome features. Therefore, in the cases without clear diagnoses or with comorbidities, the "transdiagnostic" (11) therapeutic approaches are being recommended.

The model often recommended in overcoming the difficulties and the resistance encountered during the treatment of substance dependency and comorbid conditions is an integrative approach in which different theories and methods are put to use (12). Most of the psychiatrists and other mental health professionals working in this field, whether from the schools of psychoanalysis or of cognitive behavioral therapy, regard their approach as "integrative-eclectic" therapy. In the 6-clause FRAMES mnemonic referring to the main elements in addiction treatment, the letter M refers to "menu" to emphasize the importance of availability of diverse help measures extendable to patients and to their caregivers. The programs of therapy and follow-up are applied as structured treatments known as "network therapies" that include not only the patients but also other significant members (13). In these therapeutic processes, it is necessary that the cognitive-behavioral, psychoeducational, and psychopharmacological treatments are used as the pieces of a jigsaw puzzle fitted in the exact space with the aim to complete one another.

REFERENCES

- Hasin D, Kilcoyne B. Comorbidity of psychiatric and substance use disorders in the United States: current issues and findings from the NESARC. Curr Opin Psychiatry 2012; 25:165-171.
- Castellanos-Ryan N, Struve M, Whelan R, Banaschewski T, Barker GJ, Bokde AL, Bromberg U, Büchel C, Flor H, Fauth-Bühler M, Frouin V, Gallinat J, Gowland P, Heinz A, Lawrence C, Martinot JL, Nees F, Paus T, Pausova Z, Rietschel M, Robbins TW, Smolka MN, Schumann G, Garavan H, Conrod PJ; IMAGEN Consortium. Neural and cognitive correlates of the common and specific variance across externalizing problems in young adolescence. Am J Psychiatry 2014: 171:1310-1319.
- Leibenluft E. Severe mood dysregulation, irritability, and the diagnostic boundaries of bipolar disorder in youths. Am J Psychiatry 2011; 168:129-142.
- Moreno C, Laje G, Blanco C, Jiang H, Schmidt AB, Olfson M. National trends in the outpatient diagnosis and treatment of bipolar disorder in youth. Arch Gen Psychiatry 2007; 64:1032-1039.

- Perugi G, Akiskal HS. The soft bipolar spectrum redefined: focus on the cyclothymic, anxious-sensitive, impulse-dyscontrol, and binge-eating connection in bipolar II and related conditions. Psychiatr Clin North Am 2002; 25:713-737.
- Philipsen A, Limberger MF, Lieb K, Feige B, Kleindienst N, Ebner-Priemer U, Barth J, Schmahl C, Bohus M. Attention-deficit hyperactivity disorder as a potentially aggravating factor in borderline personality disorder. Br J Psychiatry 2008; 192:118-123.
- Ersche KD, Turton AJ, Chamberlain SR, Müller U, Bullmore ET, Robbins TW. Cognitive dysfunction and anxious-impulsive personality traits are endophenotypes for drug dependence. Am J Psychiatry 2012; 169:926-936.
- Rao U, Hammen CL, Poland RE. Mechanisms underlying the comorbidity between depressive and addictive disorders in adolescents: interactions between stress and HPA activity. Am J Psychiatry 2009; 166:361-369.
- Pliszka SR. Treating ADHD and Comorbid Disorders: Psychosocial and Psychopharmocological Interventions, The Guilford Press, New York, 2009
- Badenoch B. Being a Brain-Wise Therapist: A Practical Guide to Interpersonal Neurobiology. W.W. Norton & Company, New York-London, 2008.
- McEvoy PM., Nathan P, Norton PJ. Efficacy of transdiagnostic treatments: A review of published outcome studies and future research directions. J Cogn Psychother 2009; 23:20-33.
- Galanter M. Network Therapy. American Psychiatric Publishing Textbook of Substance Abuse Treatment; Galanter M, Kleber HD (Eds.). APP, Washington D.C., USA, 2008.
- Miller WR, Forcehimes AA, Zweben A. Treating Addiction, A Guide for Professionals, The Guilford Press, London, 2011.